

Blue Whale a Fragile Giant

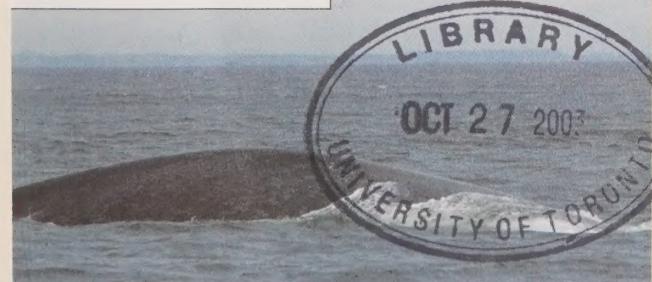
wherever in the world, animal and vegetal species are in decline, diminishing the biodiversity of our planet. In order to highlight the precarious state of the inhabitant, the **Committee on the Status of Wildlife in Canada** declared the blue whale (*Balaenoptera musculus*) of the Atlantic an "endangered species".

Decline in the number of blue whales is mainly due to commercial hunting, which reduced their numbers by more than 70% during the first half century. A low rate of calving also contributes to this situation: in Atlantic Canada, the number of mature blue whales is estimated at fewer than 100.

This brochure aims at introducing you to blue whales, where they encounter, and to the new *Act respecting the protection of wildlife species at risk in Canada*, which will help to better protect them.



Every year, blue whales come to the Estuary and Gulf of St. Lawrence to feed, travelling over distances of thousands of kilometres. In search of great concentrations of krill, they arrive as early as March, apparently through the Cabot Strait, travelling along the southwest coast of Newfoundland. Their numbers increase in June, peak in August, and drop off in October. Some whales seem to spend a good part of the winter in the St. Lawrence.



How is the status of endangered wildlife determined in Canada?

The status of wildlife species in Canada is assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), an independent advisory organization made up of sub-committees of specialists. COSEWIC can recommend a status for a species or a population (group of related individuals) based on quantitative criteria such as a decline in total population or a low or declining number of breeders.



The status categories used by COSEWIC to designate species, in decreasing order of gravity, are:

- Extinct (in the world)
- Extirpated in Canada
- Endangered
- Threatened
- Of special concern
- Not at risk

Any person may apply to COSEWIC for an assessment of the status of a wildlife species.

For more information: www.cosewic.gc.ca

Canada and Species at Risk

The preservation of species at risk has been a concern for Canadians for many years. In 1992, Canada was the first industrialized country to sign the United Nations Convention on Biological Diversity. In 1996, the Federal-Provincial Accord for the Protection of Species at Risk in Canada was signed, and, in 2003, the *Act respecting the protection of wildlife species at risk in Canada* (Species at Risk Act) was promulgated.



The Blue Whale

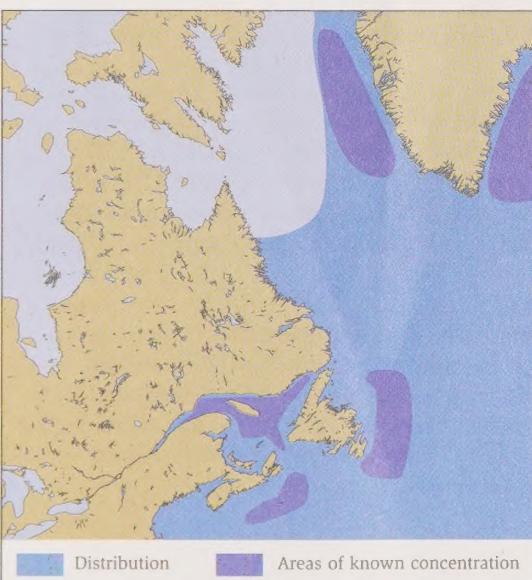
a Fragile Giant

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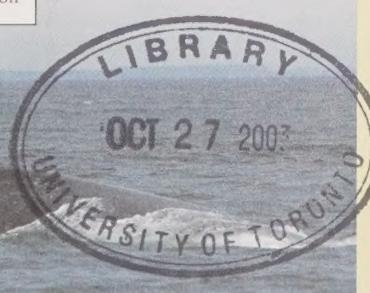
Each day, everywhere in the world, animal and vegetal species disappear forever, diminishing the biodiversity of our planet. In May 2002, in order to highlight the precarious state of the Earth's largest inhabitant, the **Committee on the Status of Endangered Wildlife in Canada** declared the blue whale (*Balaenoptera musculus*) of the Atlantic an "endangered species".

The dramatic decline in the number of blue whales is mainly due to commercial hunting, which reduced their population by more than 70% during the first half of the 20th century. A low rate of calving also contributes to this situation : in Atlantic Canada, the number of mature blue whales is estimated at fewer than 250.

This factsheet aims at introducing you to blue whales, to the threats that they encounter, and to the new *Act respecting the protection of wildlife species at risk in Canada*, which now helps to better protect them.



Every year, blue whales come to the Estuary and Gulf of St. Lawrence to feed, travelling over distances of thousands of kilometres. In search of great concentrations of krill, they arrive as early as March, apparently through the Cabot Strait, travelling along the southwest coast of Newfoundland. Their numbers increase in June, peak in August, and drop off in October. Some whales seem to spend a good part of the winter in the St. Lawrence.



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Threats to the Blue W

Collisions with Vessels

Cetaceans surface to breathe, feed, socialize, rest, and perhaps to ascertain what is happening in the vicinity. Maritime vessel traffic can disrupt these activities, and even injure or kill blue whales. According to data from the **Mingan Island Cetacean Study**, at least 16% of the blue whales observed in the St. Lawrence have scars from collisions with vessels.

Disturbances Caused by Whale-Watching Activities

Studies conducted by the **Group for Research and Education on Marine Mammals (GREMM)** in collaboration with Parks Canada, Fisheries and Oceans Canada, and the **Société de la faune et des parcs du Québec** show that the dives of a cousin of the blue whale (the fin whale) are shorter when boats are near, suggesting that they spend less time

hunting. If blue whales react in the same manner, this would reduce the quantity of food they catch, affecting their ability to store energy reserves and, eventually, could cause problems regarding migration, reproduction, and immune function.

Climate Change

Climate change could also affect blue whales by causing a change in the distribution or in the abundance of their prey.

Current Recovery Actions

A number of protection and conservation measures were recently implemented for the St. Lawrence Estuary and Gulf to protect large cetaceans such as the blue whale. Some of these measures concern regulations, others research and yet others outreach efforts. **Here are the main ones:**

REGULATIONS

Parks Canada established the **Regulations Respecting Marine Activities in the Saguenay–St. Lawrence Marine Park** with other federal departments, the Quebec government, the scientific community as well as tourism, economic and social stakeholders. They help to better protect whales from disturbances caused by whale-watching activities conducted within the marine park, through the introduction of speed limits, restricted observation periods, and minimal approach distances (400 m for endangered species such as the blue whale). For more information, read the flyer *Observation Activities at Sea in the Marine Park*.

RESEARCH

Since 1990, Fisheries and Oceans Canada studies on marine mammal health have allowed researchers to **document mortality and incidents of beached or injured animals**. A provincial network established in 1979 by Memorial University's **Whale Research Group** and Fisheries and Oceans Canada reports such observations as well as ice entrapments and entanglement events in Newfoundland.

Fisheries and Oceans Canada is also working on a research project with Parks Canada and the GREMM to **define the essential habitat of blue whales** and to assess the impact of disturbances on the species in the St. Lawrence Estuary. The *Fisheries Act*, the *Oceans Act* and the *Species at Risk Act* can help protect this habitat.

The minimum distance between a vessel and an endangered species is 400 m



Entrapment of Blue Whales in Ice

This natural phenomenon, which can occur in late winter, has been observed off the southwest coast of Newfoundland. It occurs when sea ice pushed by winds accumulates in a bay and prevents blue whales from escaping. Whales subsequently drown under, or are crushed by, the moving ice.

Pollution

Blue whales feed exclusively on krill, an organism at the bottom of the food chain, which contains lower concentrations of persistent organic products than fish. They are therefore less exposed to these contaminants than beluga, that feed on fish. However, females, when nursing, transfer certain contaminants they have accumulated throughout their lives to their young.

Entanglement in Fishing Nets

Some blue whales that become entangled in fishing nets may have difficulty surfacing to breathe and eventually drown. Although this kind of accident is rare among this species, the death of any individual could have a significant impact on the recovery of the population, which is very small.

OUTREACH EFFORTS

Whale-watching cruises and pleasure boaters are encouraged to refrain from choosing endangered species as their focus of interest in order to minimize disturbance.

A **code of ethics for marine-mammal watching activities** was drafted by Fisheries and Oceans Canada in cooperation with the whale-watching industry and the Saguenay–St. Lawrence Marine Park. The code of ethics applies to the entire St. Lawrence Estuary.

Each year, the Marine Park organizes a **whale-watching cruise-workshop** for boaters and guides, in order to acquaint them with best practices in approaching whales.

Projects intended to **reduce disturbance and collisions with vessels** were funded under the federal government's **Habitat Stewardship Program for Species at Risk**. Some examples:

- A **cetacean observation and interpretation network from the shore** is being established by the North Shore Estuary Area of Prime Concern (ZIP).
- An **awareness project** intended to encourage employees and leaders of the industry to re-design whale-watching cruises has been developed by the **Marine Mammals Ecowatch Network**.
- A **newsletter, Portraits of whales, is published** by the GREMM during the whale-watching season. This document intended for cruise operators and guides describes the research projects that are under way and the action being taken to protect the whales of the St. Lawrence.



V. Lessard

Blue whale tagging

A SHARED RESPONSIBILITY

A **recovery team**, formed in 2003, is developing a blue-whale recovery strategy for all of Atlantic Canada, in consultation with various partners. This strategy will enable all stakeholders to identify recovery measures and to see to their implementation.

The GREMM, in collaboration with fishermens' and boaters' associations NGO and Departments, is developing an **intervention network to assist marine mammals in distress**.



What You can do to Help

Because we often live near rivers and streams that flow into the habitat of blue whales, we can all make choices that will improve our environment and that of blue whales. By reducing water consumption and the use of pesticides, and by disposing of chemical products (e.g., paint, solvents, fuel) in a responsible manner, we can contribute to the recovery of the largest animal on the planet!

For More Information:

FONTAINE, Pierre-Henry. *Whales of the North Atlantic: Biology and Ecology*, Sainte-Foy, Éditions Multimondes, 1998, 290 p.

SEARS, R. 2002. « The Blue Whale », *Encyclopedia of Marine Mammals*, edited by William F. Perrin, Bernd Würsig, J. G. M. Thewissen. San Diego, CA, Academic Press. 1414 p.

SIMARD, Y. and D. LAVOIE. 1999. « The rich krill aggregation of the Saguenay - St. Lawrence Marine Park: hydroacoustic and geostatistical biomass estimates, structure, variability and significance for whales ». *Can. J. Fish. Aquat. Sci.* 56: 1182-1197.

ST. LAWRENCE-SAGUENAY MARINE PARK. *Observation Activities at Sea in the Marine Park, Regulations in effect*. 2002. Flyer. R63-241/2002E

SEARS, R. and J. Calambokidis. 2002, *Status of the Blue Whale (Balaenoptera musculus) in Canada*, Report to the Committee on the Status of Endangered Wildlife in Canada, Canadian Wildlife Service, Ottawa. 2002.

SEARS, R. and M. Williamson, F. Wenzel. M. Bérubé, D. Gendron, P. Jones, 1990. *Photographic Identification of the Blue Whale (Balaenoptera musculus) in the Gulf of St. Lawrence, Canada*. Rep. Int. Whal. Commn. Special Issue, 12: 335-342.

The Species at Risk Act (SARA)

- Once a wildlife species has been designated under SARA, it automatically becomes forbidden to kill, harm, harass, capture or take an individual, as well as to damage or destroy its residence.
- For species that are extirpated in Canada, endangered or threatened, the competent minister must prepare a strategy for their recovery.
- Fisheries and Oceans Canada is responsible for aquatic species and in this capacity is mandated to enforce prohibitions and to develop recovery strategies and action plans in partnership with stakeholders.
- A recovery strategy includes a description of the species and its needs, an identification of the threats to the survival of the species and threats to its critical habitat, a statement of the population and distribution objectives that will assist the recovery and survival of the species, and a schedule of recovery activities.

For more information: www.speciesatrisk.gc.ca

Did you know?

The blue whale is the largest animal that has ever inhabited the world. It is even larger than dinosaurs.

The Marine Mammal Regulations of the *Fisheries Act* prohibit hunting and harassment of blue whales in the St. Lawrence.

The *Oceans Act* provides for the creation of marine protected areas to protect a species or its habitat, following consultations with all interested parties.

Interesting Sites

www.rorqual.com
www.whalesonline.com
www.portraitsofwhales.net
www.parcscanada.gc.ca/saguenay
www.earthwindow.com/blue.html

To Report Whale Sightings in Newfoundland

1-888-895-3003

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Fisheries and Oceans Canada

Maurice Lamontagne Institute

Species at Risk

850, route de la Mer, P.O. Box 1000

Mont-Joli (Québec) G5H 3Z4

Telephone : (418) 775-0500

www.qc.dfo-mpo.gc.ca/smr

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